

METHOD OF LAMINATING DECORATIVE FABRIC
TO HARD, SMOOTH SUBSTRATES AND PRODUCT THEREOF

TECHNICAL FIELD

The field of the invention relates to an improved decorative plate and method of making the same, and in particular a decorative plate in which a decorative fabric is laminated to a hard, smooth substrate such as a glass plate. The invention can also be applied to other types of articles as more particularly described below.

BACKGROUND OF THE INVENTION

Methods of decorating plates and dishes by hand painting have been well known for centuries. Decorative plates have been sold as souvenirs in gift shops, tourist resorts and craft fairs. Part of the appeal of the decorative plates is the opportunity to decorate the plate in a unique way or as a limited edition, which sets it apart from mass-manufactured items.

SUMMARY OF THE INVENTION

The present invention relates to a method of assembling a decorative fabric to a substrate, including applying adhesive and optionally glitter to the fabric, adhering the fabric to the substrate so that a top side of the fabric can be viewed from the top side of the assembly, and applying a high gloss transparent and waterproof finish coat to the encapsulate the fabric and the substrate, such that the decorative aspects of the fabric, including the glitter are visible to such an extent that they appear to be substantially integral with the substrate. The finish coat also provides a plate that is useable and cleanable in addition to being decorative.

Other aspects of the invention include details of the method which provide a surface without bubbles or imperfections.

Still other aspects of the invention will be apparent from the detailed description that follows, in which reference is made to the accompanying drawings, which form a part hereof, and which illustrate a preferred method of the invention, without intending to limit the invention beyond that which is enable by the drawings and description herein.

BRIEF DESCRIPTION OF THE DRAWINGS

Figs. 1-9 are perspective views illustrating the acts in a preferred method of the present invention.

DETAILED DESCRIPTION

Referring to Fig. 1 of the drawings, for an illustrative example of the invention, a plate of clear glass is selected as the substrate. Wherever the term "clear" is used herein, it shall be understood to mean both transparent and substantially colorless. The plate could be of various sizes, including a salad plate, a dinner plate or a platter, but in this example, a dinner plate is used. As a preparatory activity, the plate is washed, cleaned and dried.

To this substrate, the invention provides a method of attaching, securing and coating a decorative fabric, the term "decorative" relating to color, pattern or other decoration. The fabric is preferably 100% cotton or a polyester blend, which includes bandanas, napkins and doilies.

As shown in Fig. 1, the fabric 10 is cut to the size of the plate 11 plus 1 inch using a suitable cutting instrument 12.

Next, as shown in Fig. 2, working in a well-ventilated area, an adhesive 13, preferably of the type

sold under the trademark Mod Podge®, Gloss Lustre, is applied with a sponge brush 14 over the top (obverse) side of the material 10, which will be visible from the top of the plate. The adhesive is a water-based sealer, glue and finish for all surfaces, similar to a white glue.

Then, as seen in Fig. 3, glitter 15 can be added by from a container by sprinkling it on the side of the fabric having the adhesive applied to it. Several types or colors of glitter may be applied to provide aesthetic decoration.

Next, as seen in Fig. 4, the glass plate 11 is inverted and elevated on a cylindrical supporting object 16 to make it easy to work on. Working on the back side of the clear plate, the coated material 10 is placed top side down over the back of the plate 11, so that the coated side with glitter will be viewed through the transparent plate. The excess fabric around the edges will drape down from the elevated plate.

While wearing rubber gloves, a person should work the material tightly over the back of the plate with the hands. Additional adhesive is applied with the sponge brush 14 to the back of the material 10 as shown in Fig. 5. The adhesive, which is also a sealant, will soak through the material. Using the brush, the fabric should be flattened and smoothed, using the fingers to create a tight bond between material and plate. More of the adhesive should be applied as needed. The extra 1 inch of material is turned to the front side of the plate, running the fingers over the edge to insure a tight bond. The material is laid flat against the back of the plate. The material is pulled tight and flat across the bottom of the plate and around its edges. The plate should be left to dry inverted on a cylinder type of object for approximately 2 - 5 hours.

When dry, the extra fabric 10 is cut away with a straight edge 17 using the edge of the plate, as seen in Fig. 6.

Then, using a sanding pad 18, the edge of the material 10 is sanded along the edge of the plate as seen in Fig. 7. The fabric edge should be flush with the glass.

The plate is now ready for the finish coat of a high gloss, transparent material which will also waterproof the plate in the process.

Appropriate amounts of a clear, high gloss, resilient coating material, such as Envirotex Lite®, are mixed with a curing agent in a glass container in a well-ventilated area. This is a two-part system having a hardner containing nonyl Phenol, polyoxyalkyleneamines, and N-Aminoethylpiperazine and a resin containing Bisphenol/A/epichlorohydrin resin and aliphatic and aromatic glycidyl ethers.

This must be undertaken with special chemical-resistant gloves, protection against inhalation and safety glasses according to the manufacturer's instructions for using the product. Using a sponge brush, apply Envirotex Lite® evenly over the back side of the fabric-covered plate as shown in Fig. 8. Move the sponge brush along the edge of the plate to seal the edge.

Place the plate upside down on a cylinder type object on a shelving unit that has been covered with paper. Using a propane torch, run the flame over the finish coated plate to burst any air bubbles that exist. Allow the coating on the plate to dry in a 70-degree or higher dust free environment. The finish coating will drip off of the plate as it is drying. Allow to dry for 8 hours in a controlled environment. Then allow to cure for another 3 days and according to the manufacturer's specification.

Next, cut away excess finish coating material from the lip 19 of the plate 11 as shown in Fig. 9.

Then, the plate for 2 - 3 hours is soaked in a bath of warm water to insure that it is waterproof. This will also soften the bumps that have formed from the finish

material dripping over the sides of the plate. Take plate out of warm water, dry with towel and cut the bumps off of the front side of the plate, following the lip of the plate. Scrape the front of the glass plate to remove any residue of the adhesive or the finish material.

A second coat of the finish material may be applied, if needed. After the surface is prepared by wiping with a clean cloth and alcohol prior to applying the second coat, the steps for applying the first coat are repeated.

When the finish is suitable, the front and back of the plate can be cleaned with a glass cleaner. The finished product is then inspected to insure that the fabric adhered to the glass plate and that defects do not exist in the finished product.

Having described the invention with respect to a preferred embodiment, it also applicable to substrates such as bowls, platters, cutting boards (made out of glass), regular glass, as well as to metals and non-transparent glass. The method can be used to attach fabric, napkin, newspaper print, magazine articles, greeting cards, wrapping paper, etc. can be applied to the front of non-clear objects and then sealed with the waterproof sealer.

This method can be applied to, but not limited to: counter tops, TV trays, tables, paneling, coasters, boxes, or to any wood, metal or glass article.

The resulting product is waterproof for purposes of washing by hand with water of a temperature typical of hand washing.